

# **Noxious Weeds in Your Back Yard**

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**WA Noxious Weed Control Board**

# **Video Review**

- **What is a Noxious weed?**
  - **Non-native, Invasive Plants**
    - **Destructive, Competitive, Difficult to control**
- **Why be concerned with Noxious Weeds?**
  - **Impacts**
    - **Environmental, Recreational, Public Health, Economic**

# **Video Review**

- **How Weeds are Moved**
  - **Purchasing, Boats, cars, Agricultural products, Hiking, animals**
- **How to prevent weed infestations**
  - **Be aware of what you plant**
  - **Check Cars/ equipment/ pets for seeds**
  - **Remove plants before they become a problem**

# Weed Classes

**A**

**B**

**C**

# CLASS “A” WEEDs

- Non-native
- Pose a serious threat to WA
- Limited Distribution
- Unrecorded

**Highest Priority**

- Goal
  - Prevention of new infestations
  - Eradication of infestations

# **CLASS “B” WEEDs**

- Non-native**
- Abundant Distribution in portions**
- Limited to no distribution in other areas**
- Pose a serious threat to “clean” areas**
- Goal**
  - Prevention of new infestations in Designated areas**
  - Containment**

# **CLASS “B-Designate” Weeds**

- **State has authority to designate control**
- **Regions where weed is unrecorded or limited in Distribution**
- **Automatically placed on county/ weed district list**
- **Goal: Containment and eventual eradication**

# CLASS “B-Designate” Weeds





# **CLASS “B-NON Designate” Weeds**

- **Regions where weed is common or abundant.**
- **County/ weed districts have ability to place on their weed list**
- **Goal: prevent spread to designated areas**

# CLASS “C” WEEDs

- **Non-native** (can be native)
  - **Widespread Distribution**
  - **Control is Decided at the County or district level**
- 
- **Goal**
    - **Long-term suppression**
    - **Control is decided at the local level**





# **Class A Weeds In The Area**

# Buffalobur

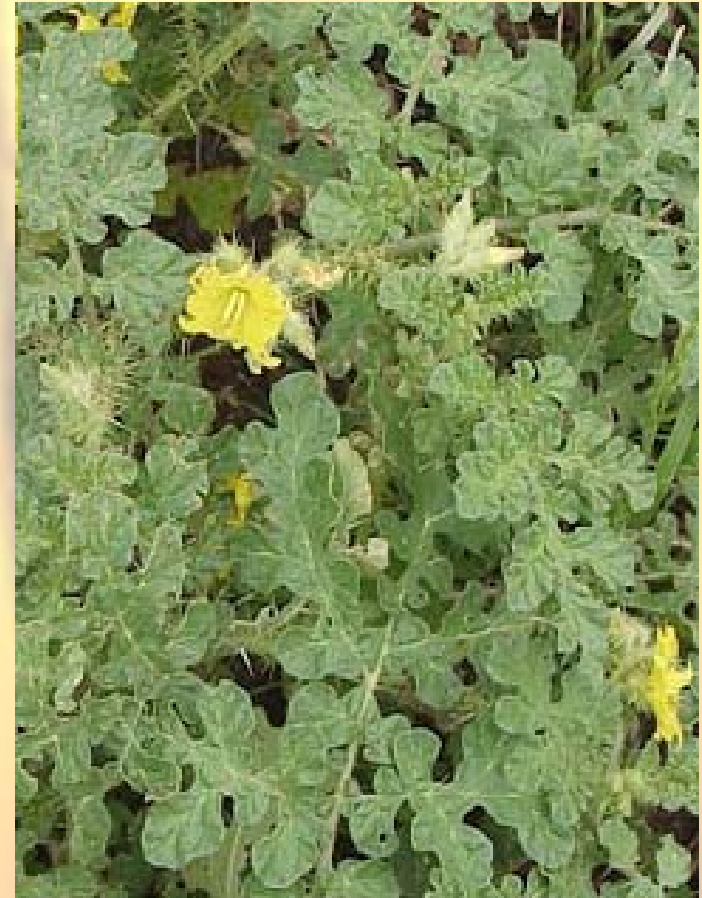
## *(Solanum rostratum)*

- **Annual**
- **Flowers**
  - yellow
  - 5 lobed, wheel-shaped
- **Leaves**
  - Alternate
  - (bi)pinnately lobed,
  - Spiny



# Buffalobur

- **Habitat**
  - Pastures, waste ground, roadsides, railroads.
  - Bird Seed Contaminants
- **Impacts**
  - Spines are very dense, stiff, and sharp
  - Somewhat toxic



# Italian thistle

## *(Carduus pycnocephalus)*

- **Winter annual**
  - 6 feet tall
  - Spiny-winged stems covered with cobwebby hairs
- **Flowers**
  - 5 pinkish,
  - Cylindrical heads
  - Borne in terminal clusters
- **Leaves**
  - Oblanceolate to lanceolate



# **Italian thistle**

- **Habitat**

- **pastures, ranges, roadsides, rural areas, fallow cropland, railroad rights-of-way, field margins, and ditchbanks**

- **Impacts**

- **displace more desirable forage or cover plants**
- **(found in areas of Whitman county in 2003)**



# Silverleaf nightshade

## *(Solanum elaeagnifolium)*

- **Perennial herb**
- **Flower**
  - blue-violet
  - 5 fused petals
  - With bright yellow stamens
  - On stalks in clusters or singly





# Silverleaf nightshade

## *(Solanum elaeagnifolium)*

- **Leaves**
  - lance-shaped
  - Wavy margins
  - Covered with short, white hairs
    - give the plant a silvery-gray color.
  - Yellow spines on the leaf ribs of the plant.





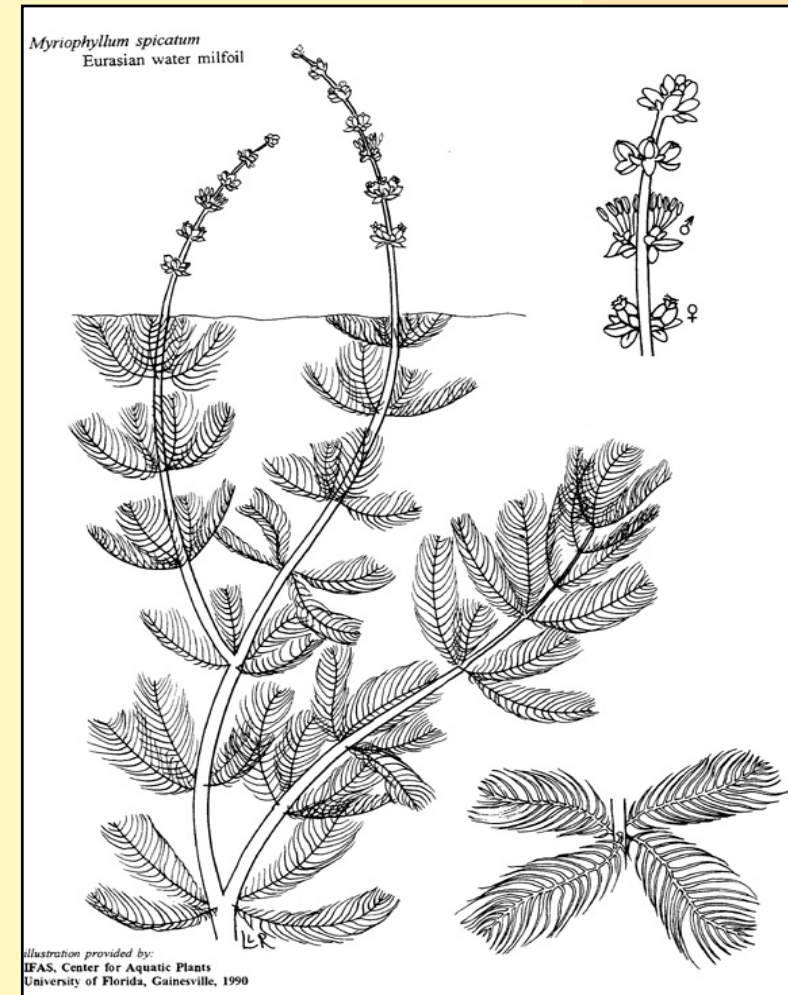
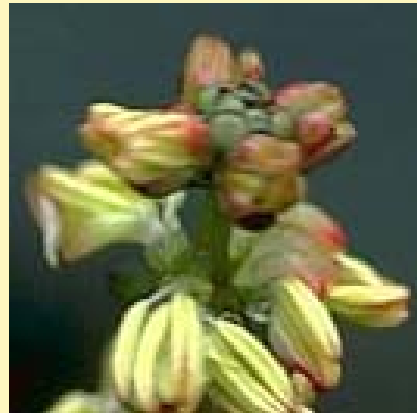
# **Class B Weeds In The Area**

# Eurasian watermilfoil

## *(Myriophyllum spicatum)*

B/D

- **Emergent herbaceous**
- **Stems**
  - long branching
- **Flowers**
  - small reddish
  - above the water on a spike
- **Leaves**
  - feather-like whorled leaves



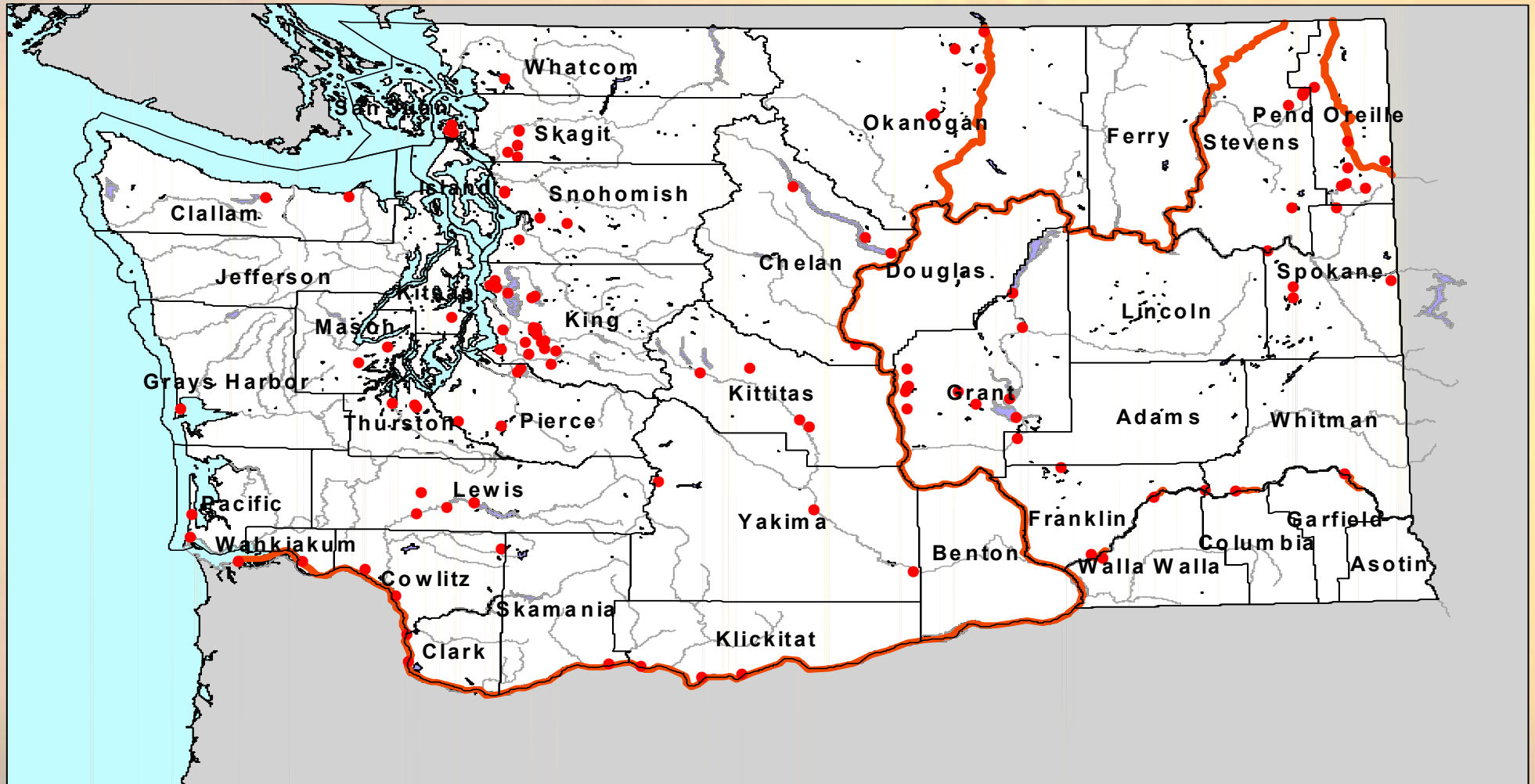
# Eurasian watermilfoil

- **Habitat**
  - fresh to brackish water
  - disturbed areas where native plants cannot adapt
- **Impacts**
  - forms large, floating mats surface water bodies
  - preventing light penetration for native aquatic plants and slowing water flow





# Known locations of *Myriophyllum spicatum*, 2001



# **Yellow Floating Heart**

## ***(Nymphoides peltata)***

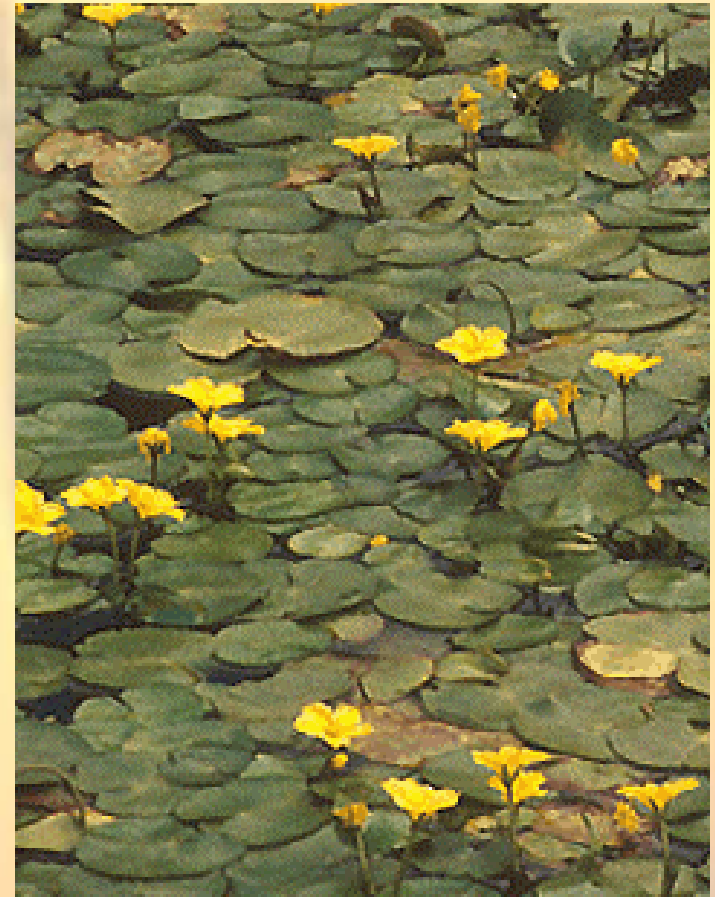
**B/D**

- **Aquatic, bottom-rooted perennial**
- **Flower:**
  - **Bright Yellow**
  - **5-petaled,**
  - **Edges are distinctively fringed**



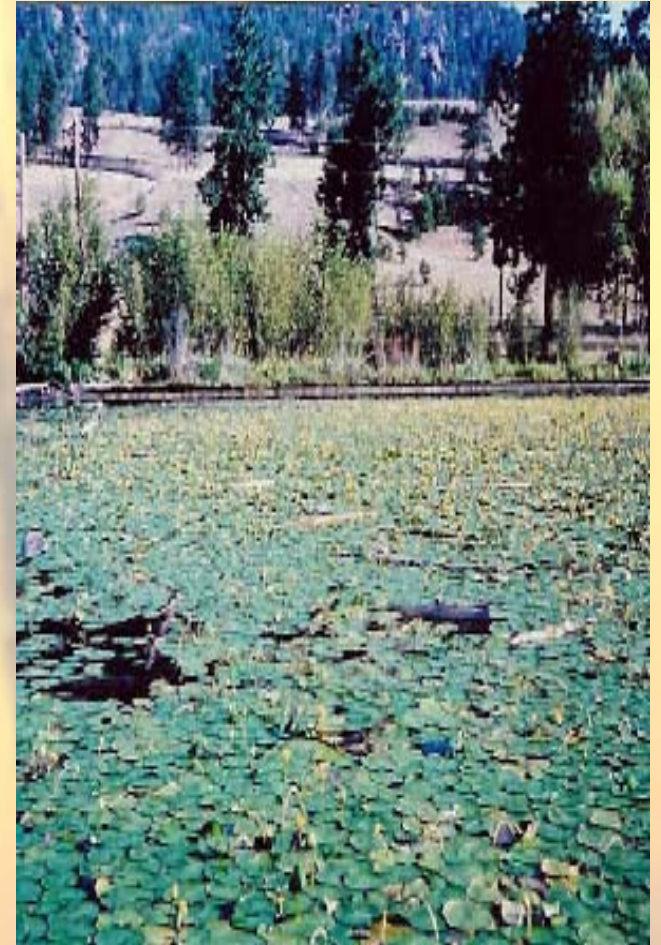
# Yellow Floating Heart

- **Leaves:**
  - heart-shaped to circular
  - 3 - 10 cm long
  - on long stalks
  - margins are slightly wavy, or scalloped
  - Often purplish underneath



# Yellow floating heart

- **Habitat**
  - slow moving rivers lakes, reservoirs, ponds and swamps
- **Impacts:**
  - Dense mats
  - impair water flow
  - impacts recreational uses
  - fish and wildlife habitat





# Himalayan, Giant & Japanese knotweeds

B/N

- **Perennial**
  - **Creeping rhizomes**
- **Stems**
  - **Hollow**
  - **7- 10 ft tall**
  - **Weakly woody**
  - **Swollen at nodes**
  - **Usually reddish-brown at maturity**

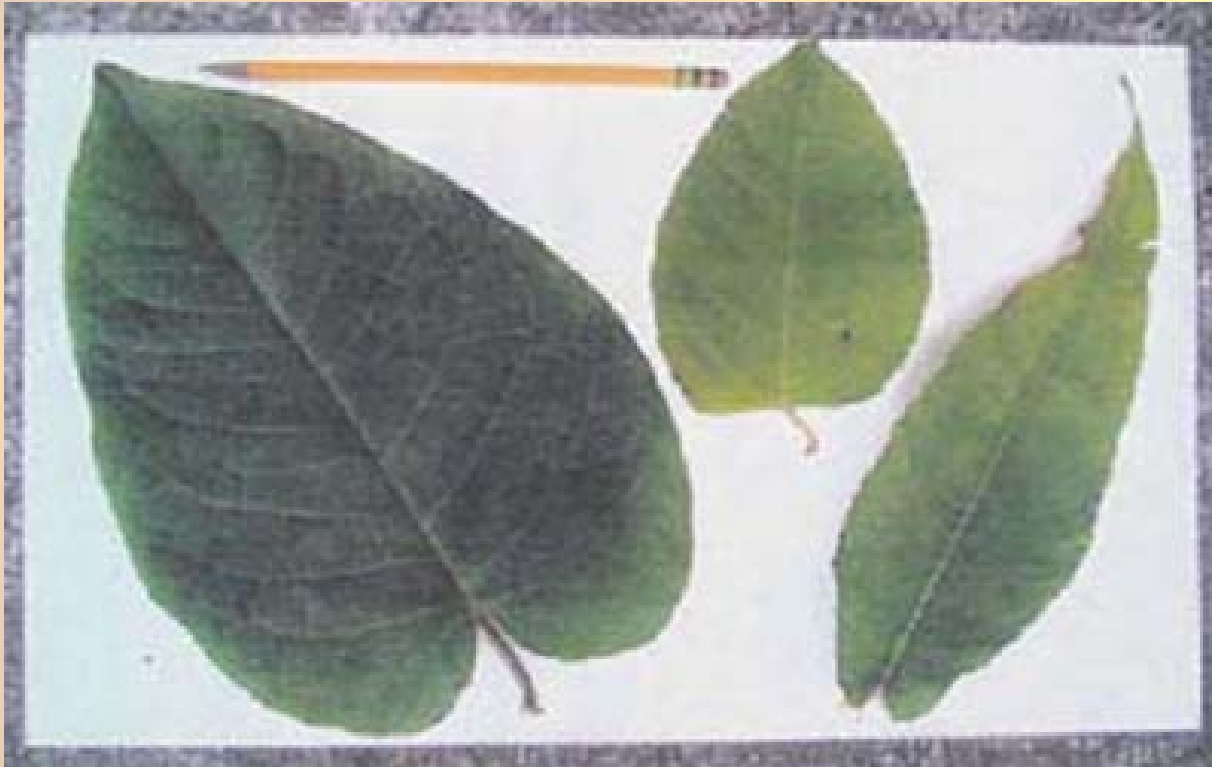


# **Knotweeds**

- **Flowers**
  - Panicles
  - White to pinkish
- **Leaves**
  - Alternate
  - Lanceolate, Ovate, Cordate
  - Short hairs



# Knotweeds



County





# **Knotweeds**

- **Habitat**
  - along streams & rivers
  - ditches & ravines
  - moist soils in cool temperate
- **Impacts**
  - invades riparian areas
  - create dense colonies that exclude native vegetation
- **New plants can sprout from fragments as small as 1 inch**



# Purple loosestrife

## *(Lythrum salicaria)*

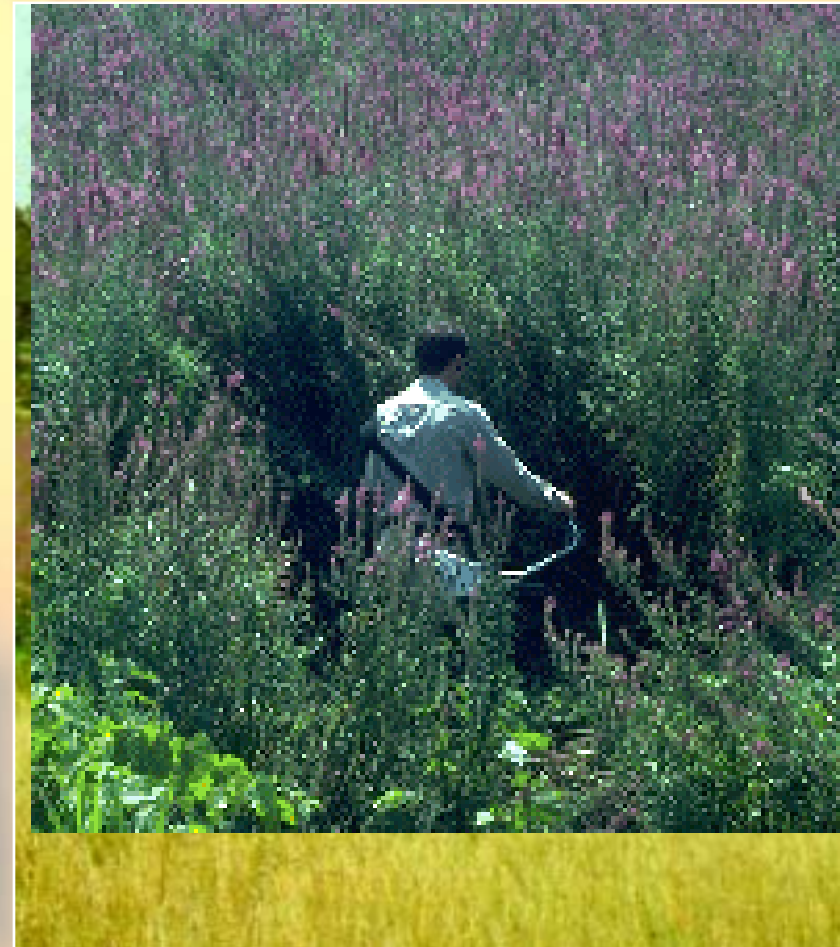
- **Perennial herb**
- **Stem**
  - square, woody
- **Flowers**
  - Purple, 5-7 petals
- **Leaves**
  - lance-shaped
  - opposite or whorled



# Purple loosestrife

## *(Lythrum salicaria)*

- **Habitat**
  - wetlands
- **Impacts**
  - forms dense, homogeneous stands that restrict native wetland plant species
  - outcompetes and replaces native flowering plants
  - Degrading nutrition for wildlife



# Saltcedar

## (*Tamarix ramosissima*)

B/D

- Spreading shrubs or Small trees
- Flowers
  - Pale pink to white
- Leaves
  - Alternate, Scale-like
  - Slender branches



# Saltcedar

## (*Tamarix ramosissima*)

- **Habitat**
  - streams, bottomlands, banks & drainage washes.
  - Can grow on highly saline soils & can tolerate alkali conditions.
- **Impacts**
  - disrupts native plant & wildlife communities
  - monopolizes moisture, and increases the frequency, intensity and effects of fires and floods





# **Non- Native Hawk weeds**

## ***(Hieracium spp.)***

B & C

- **Perennials**
- **Flowers:**
  - Range from yellow to orange
  - Ray flowers
  - On long Stocks
- **Habitat:**
  - Permanent meadows, grasslands, range & pastures, and Roadsides



<b>Mouseear</b>	<i>Hieracium pilosella</i>	<b>Class B</b>
<b>Orange</b>	<i>Hieracium aurantiacum</i>	<b>Class B</b>
<b>Oxtongue</b>	<i>Picris hieracioides</i>	<b>Class B</b>
<b>Polar</b>	<i>Hieracium atratum</i>	<b>Class B</b>
<b>Smooth</b>	<i>Hieracium laevigatum</i>	<b>Class B</b>
<b>Yellow devil</b>	<i>Hieracium floribundum</i>	<b>Class A</b>
<b>Queen-Devil</b>	<i>Hieracium glomeratum</i>	<b>Class B</b>
<b>Yellow</b>	<i>Hieracium caespitosum</i>	<b>Class B</b>

# **Yellow Hawkweed**

**(*Hieracium caespitosum* Dumort.)**

- **Bristly-haired, narrow, elongated leaves four to six inches long**
- **Yellow flowering stalks grow from a few inches to three ft**
- **The stems have short, stiff hairs and contain a milky latex sap inside the stem**



# Queen-Devil hawkweed

## *(Hieracium glomeratum)*

- **Perennial (2-3 feet tall)**
  - Can hybridize with meadow and tall hawkweeds
- **Leaves:**
  - Lancolate
  - Intermediate length (4-8 in)
- **Flowers**
  - Yellow
  - Branched, Clusters
  - Panicle 4-6 inches across





# **Orange Hawkweed**

## ***(Hieracium aurantiacum)***

**flowers, each about an inch in diameter and usually red on the margin, merging into an orange-colored center**

- matted hairy leaves**
- Stocks leafless and covered with stiff black hairs**



# **Non- Native Hawk weeds**

- **Impacts:**
  - **Potential to hybridize with native**
  - **Aggressive competitors of pasture and range plant species.**
    - **unpalatable**
    - **crowds out more palatable species**



# Myrtle spurge

## *(Euphorbia myrsinites)*

- **Perennial forb**
  - Spreads laterally
- **Flowers**
  - Inconspicuous
  - Showy bracts
  - Yellow-green
  - Early spring
- **Leaves**
  - Alternate, fleshy, blue green





# Myrtle spurge

- **Habitat:**
  - Well drained
  - Dry to moist
  - Range lands
- **Impacts:**
  - Caustic latex sap
  - Crowds out native species





# **Leafy spurge**

## ***(Euphorbia esula)***

- **Perennial**
- **Flower**
  - **inconspicuous**
  - **small green without petals**
  - **showy yellow bracts**



# Leafy spurge (*Euphorbia esula*)

- Leaves
  - Alternate
    - yellow-green, turn red with the first frost
    - leaves located on the lower half of the stem are scale-like
    - The upper portion are linear to oblong.
- \*Plants exude milky “sap”



# Leafy spurge







# Scotch broom

## *Cytisus scoparius*

B/D

- Woody perennial shrub
  - 9 feet tall
- **Flowers**
  - Showy
  - Bright yellow legume like flowers
  - Abundant along the stems
- **Leaves**
  - three parted with simple margins



# Scotch broom

- **Habitat**
  - poor, rocky soils
- **Impacts**
  - capable of crowding out desirable native plants
  - potential fire hazard
  - All parts of the plant are poisonous if eaten





# Annual bugloss

(*Anchusa arvensis* (L) Bieb)

- **Annual**
- **Flowers(spikelets)**
  - Blue funnel-formed
  - Clusters at the tip of the plant
- **Leaves:**
  - lance-shaped
  - Wavy
  - bristly hairy



# Common Bugloss

*(Anchusa officinalis)*

- Perennial herb with a deep taproot
- Flowers(spikelets)
  - iridescent Blue funnel-formed
  - Clusters at the tip of the plant
- Leaves:
  - lance-shaped
  - bristly hairy coarsely hairy



# Bluweed, Vipers bugloss

## *(Echium vulgare)*

- **Biennial**
- **Flowers**
  - violet-blue
  - in a spike
  - funnel-shaped
  - Stamens are red
- **Leaves**
  - **wavy**
  - linear-lanceolate
  - Covered in Bristly hairs
- **sharp spines, which cover the plant**



# Bugloss Differences

<b>Blueweed, Vipers</b>	<b>Red Stamen</b>
<b>Common</b>	<b>White center shaped like second flower</b>
<b>Annual</b>	<b>Light blue, funnel shaped</b>



# Bugloss

- **Habitat:**
  - roadsides, in disturbed habitats, pastures, and cultivated fields
  - like warmth and prefer light, dry stony soils on open sites.
- **Impacts:**
  - invades cultivated fields of small grain crops
  - densities can reduce yields in lentils and peas.



# Knapweeds



*Typical diffuse knapweed infestation.*



**Diffuse**



**Meadow**



**Spotted**



	Flower	Bracts
<b>Diffuse</b> <b>Centaurea</b> <i>diffusa</i>	<b>White, rose, or purple</b>	<b>Covered with “comb-like” spines</b>
<b>Meadow</b> <b>Centaurea</b> <i>jacea x nigra</i>	<b>Solitary, globe- shaped heads; rose to purple</b>	<b>about the width of the bract and rounded at the tip</b>
<b>Spotted</b> <b>Centaurea</b> <i>biebersteinii</i>	<b>Solitary; purple, pink or sometimes white</b>	<b>Fringed tips dark &amp; short</b>





**Bighead knapweed**



**Russian knapweed**



**Yellow starthistle**

	Flower	Bracts
<b>Bighead</b> <i>Centaurea macrocephala</i>	<b>Solitary,</b> <b>in a large globe-shaped head;</b> <b>yellow</b>	<b>Thin &amp; papery,</b> <b>with fringed margins</b>
<b>Russian</b> <i>Acroptilon repens</i>	<b>Pink to purple</b>	<b>Pearly and papery, with no noticeable fringes or spines</b>
<b>Yellow Starthistle</b> <i>Centaurea solstitialis</i>	<b>Single, terminal;</b> <b>bright yellow</b>	<b>Modified into stiff spines up to <math>\frac{3}{4}</math>" long</b>





# Knapweeds

- **Habitat**
  - poor soil, dry, damp areas
  - Where ever the seed falls
- **Impact**
  - Increase soil erosion
  - Exuding a “poison”
  - Nutritional sink
  - Shade
  - Fuel for Fires



# Rush Skeletonweed

- Perennial
- Flowers
  - scattered on branches
  - 7 to 15 yellow star shaped flowers per head
- Leaves
  - sharply pointed
  - rosette of hairless, basal leaves
- \*coarse, downward pointing brown hairs near the base of the stem





# Rush Skeletonweed

- Habitat
  - sandy to gravelly soils
  - Roadsides, Crops, rangeland
- Impacts
  - Forage production is lowered
  - Crop yields are also reduced
- Spread by seeds and root fragmentation

# Mustards

- **Hairy whitetop**
  - *Cardaria pubescens*
- **Hoary cress**
  - *Cardaria draba*
- **Perennial pepperweed**
  - *Lepidium latifolium*
- **Hoary alyssum**
  - *Berteroa incana*



# Mustards

Plant	Flowers	Seed Pod	Leaves
Hairy Whitetop	4	Round	*Basal
Hoary cress	4	Heart Shaped	*Basal *Edges toothed
Perennial pepperweed	Slightly lobed	rounded, flattened	*Waxy *Smooth or toothed margins *Alternate
Hoary Alyssum	Deeply cleft	Oblong Hairy	*Sparse *Opposite

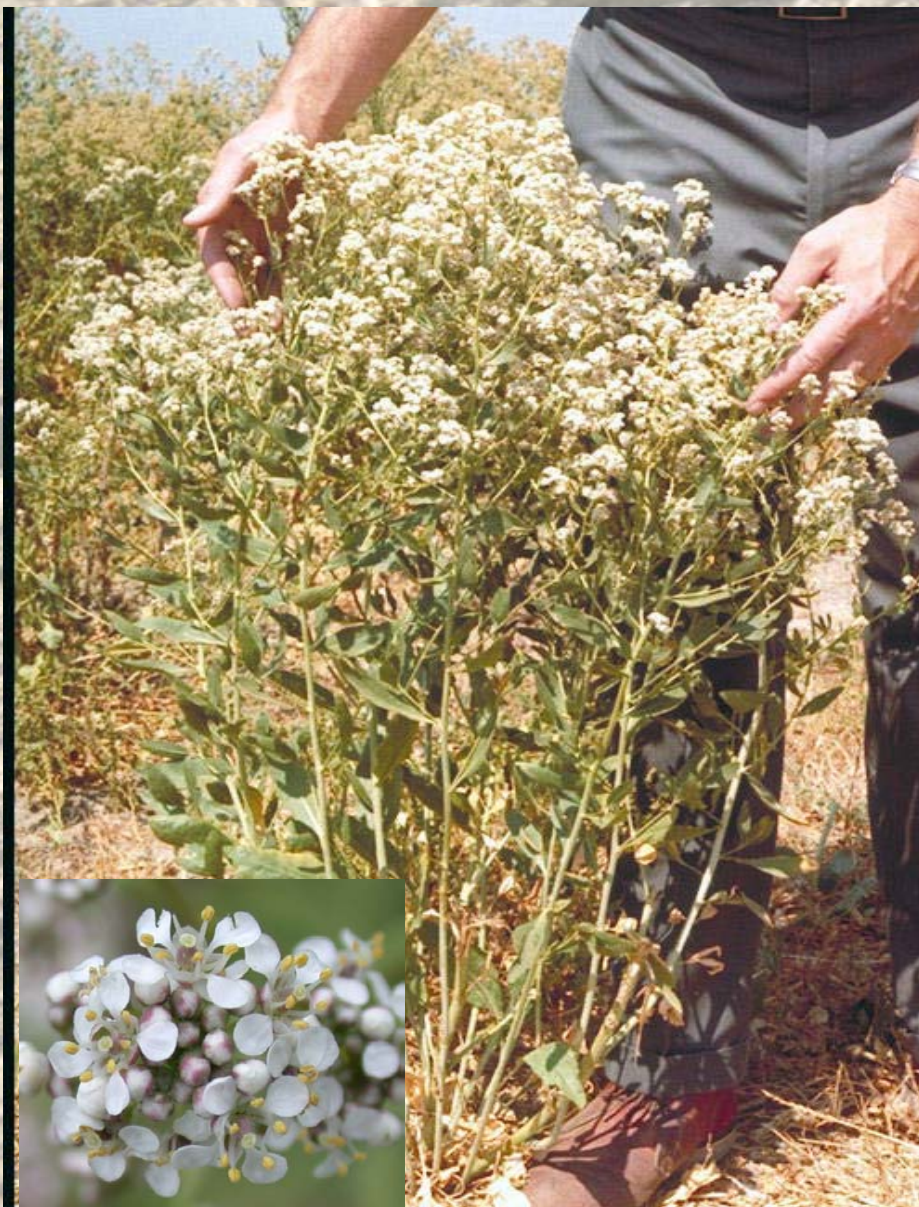


Hairy Whitetop



Hoary cress





**Perennial pepperweed**



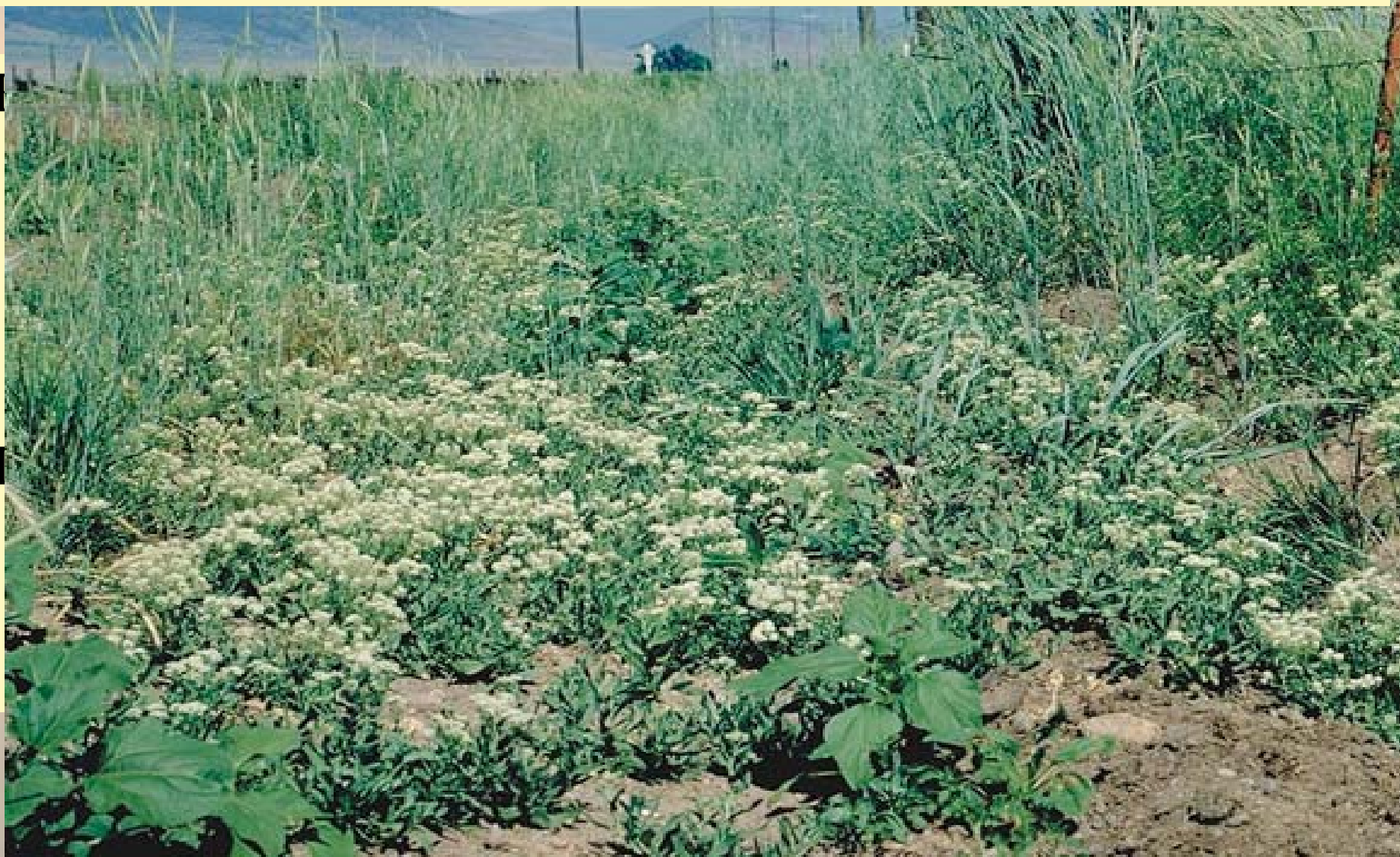
**Hoary Alyssum**



# Mustards

- I

- I



# Musk thistle

## *Carduus nutans*

- Biennial
- Flowers
  - Solitary
  - Reddish purple
- Leaves
  - Basal
  - Deeply lobed





# Musk thistle

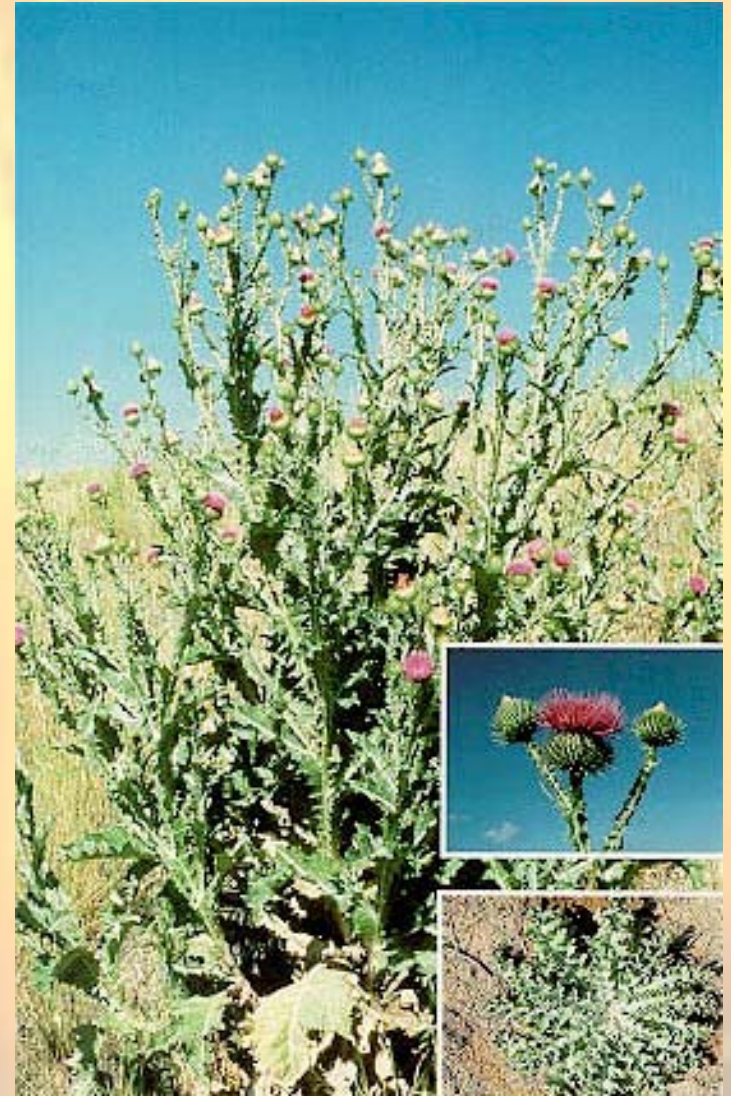


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# *Scotch thistle*

## *Onopordum acanthium*

- **Biennial**
- **Flower:**
  - Dark pink to lavender
  - Globe-shaped flower heads
  - Groups of 2 or 3 on branch tips
  - Heads are up to 2 inches in diameter, with long, stiff, needle-like bracts at the base
- **Leaves:**
  - 2 feet long and 1 foot wide
  - Sharp, yellow spines
  - Covered with a thick mat of hairs



# *Scotch thistle*

- **Habitat:**
  - waste places, as well as rivers, streams, canals, or other waterways
  - It can also be abundant in dry pastures, fields, and rangeland
- **Impacts:**
  - Reduce forage production and virtually prohibit land utilization for livestock.
  - Dense stands of the large, spiny plants constitute a barrier to livestock movement, almost totally excluding animals from grazing and access to water



# *Scotch thistle*



# Sulfur cinquefoil

## *Potentilla recta*

- **Perennial**
- **Flowers:**
  - 5 light yellow petals surrounding a dark yellow center
  - flat-topped 3-6 inches across
- **Leaves:**
  - Rough-hairy
  - 5-7 toothed
  - Palmately arranged leaflets 2-4 inches long





# Sulfur cinquefoil

- **Habitat:**
  - form monocultures over large areas of roadside, waste places, and unwelcome areas that are not easily controlled by mowing
- **Impacts:**
  - strong competitor that reduces growth of many rangeland sites
  - Because of its high tannin content, it is not eaten by most wildlife and livestock



# Sulfur cinquefoil





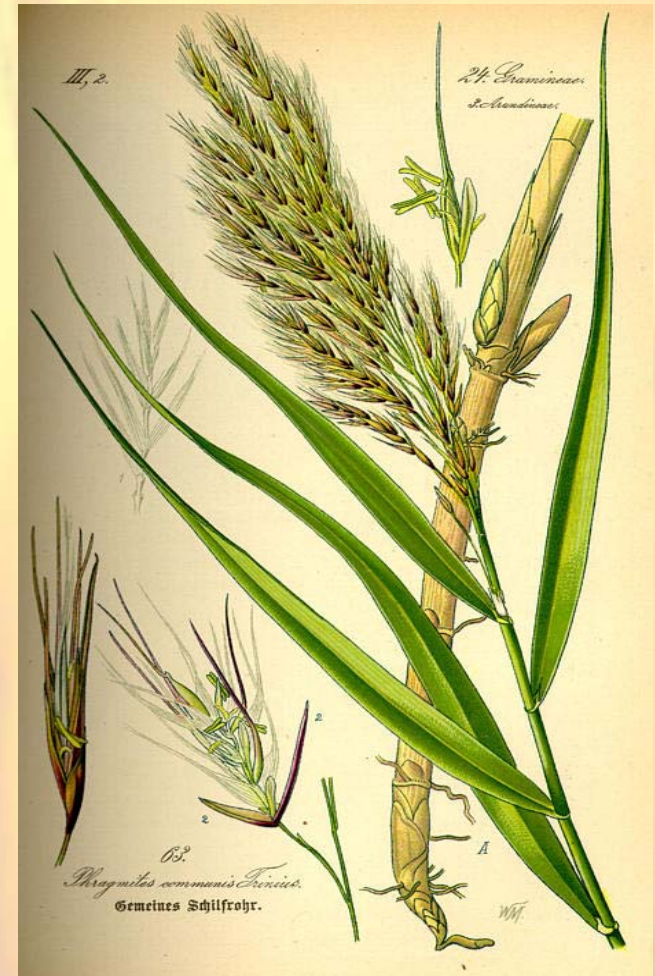


# **Class C Weeds In The Area**

# Phragmites (Non-native Genotype)

## *Phragmites australis*

- **Perennial Grass**
  - **Creeping rhizomes**
  - **Stolon**
- **Stems**
  - **Hollow**
  - **12 ft tall**
- **Leaves**
  - **Lanceolate**
  - **8-16 inches long**



<b>Distinguishing Characteristics</b>	<b>Native Genotype</b>	<b>Non-Native Genotype</b>
<b>Observed stand Density</b>	<i>Less dense</i>	<i>More Dense</i>
<b>Stem thickness</b>	<i>Thin, Approximately the size of a pencil. Stems appear “crooked” from blowing over in the wind.</i>	<i>Thicker, Approximately the size of a finger.</i>
<b>Stem</b>	<i>Smooth and shiny, appearing polished. Green in the summer, changing to brown or gray in the winter</i>	<i>Rough and Ribbed, dull Tan coloration</i>
<b>Ligule Color</b>	<i>Reddish-Purple in Spring. Fading to chesnut brown</i>	<i>Green to yellow-green</i>
<b>Flower</b>	<i>Less dense, possibly appearing earlier in the season. Senescing earlier.</i>	<i>More dense, “clusters” larger. Thought to senesce later (variable due to environmental factors)</i>

# Phragmites

- **Habitat:**
  - Wetlands
- **Impacts:**
  - Aggressive competitor
  - Crowds out native species
  - Increases fire frequency and intensity





# **Yellow Flag iris**

*(Iris pseudacorus)*

- **Rhizomatous Perennial**
- **Flowers:**
  - **Yellow with small black lines**
  - **Stems can carry up to 12 flowers**



# Yellow Flag iris

- **Leaves:**
  - Long and stiff
  - Sword shaped
  - Sharp edges
- **Habitat:**
  - Damp edges of ponds lakes and rivers
- **Impacts:**
  - Crowds out native species



# Spiny Cocklebur

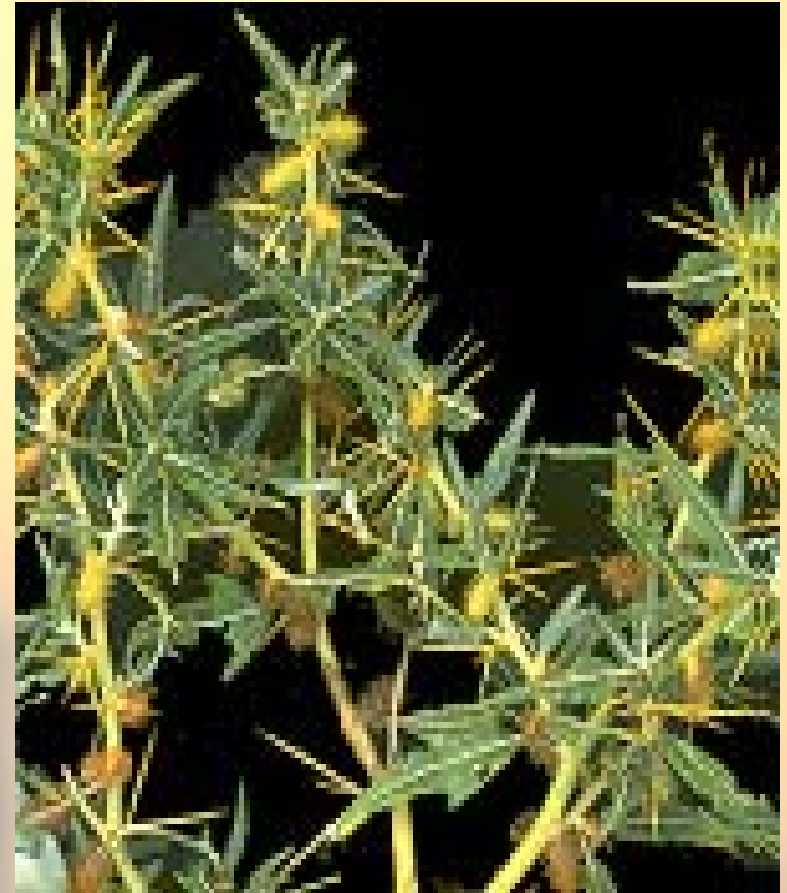
(*Xanthium spinosum* L.)

- **Annual (3ft)**
- **Flower**
  - Small inconspicuous
  - creamy green
- **Leaves**
  - shiny dark green
  - hairy on the upper surface
  - three-lobed



# Spiny Cocklebur

- egg-shaped burr
- one inch long spines are found in leaf axils and at stem nodes





# **Spiny Cocklebur**

- **Habitat:**
  - wide variety of soil types growing in cultivated fields, wastelands, farm yards, flood plains, and along waterways
- **Impacts:**
  - bur can become tangled in the hide of cattle and horses and in the wool of sheep
  - compete with summer crops

# Dalmatian toadflax

B/D

## *Linaria dalmatica*

- **Perennial herb**
- **Flowers**
  - bright yellow, tinged with orange
  - resemble snapdragon flowers
- **Leaves**
  - light green, waxy, alternate leaves are heart-shaped and clasp the stem



# Yellow Toadflax

## *Linaria vulgaris*

- **Perennial**
- **Flowers**
  - Snapdragon type
  - yellow (butter) and orange (egg)
  - long with spur
- **Leaves**
  - Numerous long and narrow pale green
  - smooth and pointed



# Dalmatian & Yellow Toadflax

- **Habitat**
  - roadsides, pastures, rangelands, and waste areas
- **Impacts**
  - strongly competitive





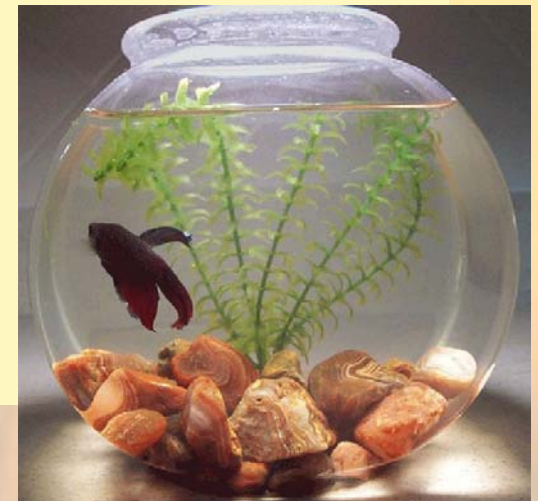
# How do weeds move?

- **Hitchhike**
  - Cars
  - Boats
  - crops
- **Sold**
- **Cut and given to friends**



# How do weeds move?

- Yard clippings
- Seed dispersal
- Dumped in water





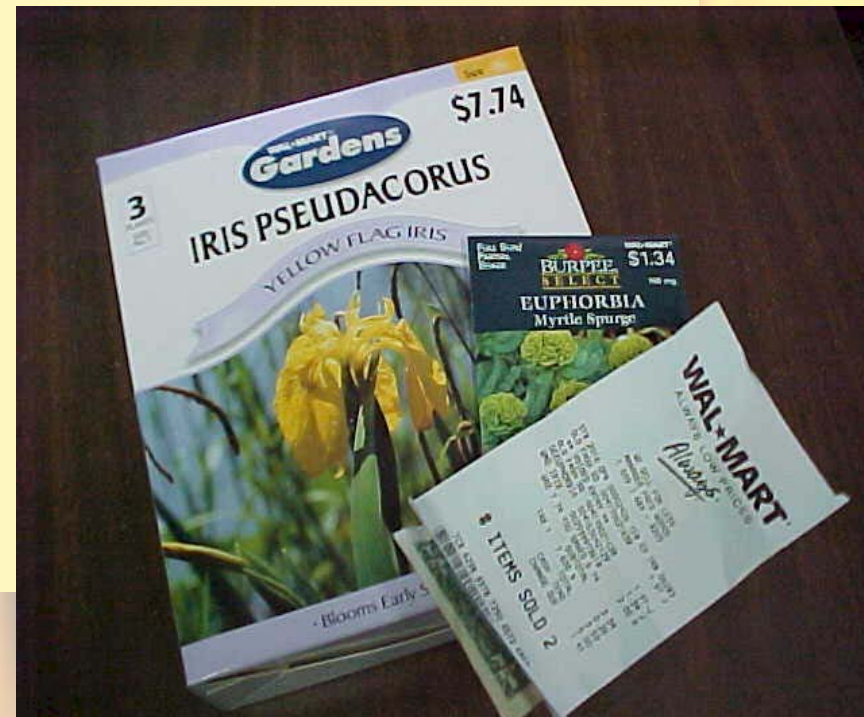
# How You Can Get Involved

- **Familiarize yourself with some weeds**
- **Educate you & your neighbors**
- **Control your noxious weeds**



# Be Aware

- **Know what you plant**
- **Noxious weeds can be sold**
  - **Prohibited plants**
  - **What to do**
    - **Talk to the nursery**
    - **Contact your local or State Weed Board**





How do you know if a plant  
is a Noxious weed?



Contact your local or State  
Weed Board!!!



**State Weed Board Web**  
**[www.nwcb.wa.gov](http://www.nwcb.wa.gov)**